

NR: 15-18_Product Launch – ESC Coils
DATE: 10.09.2018
TO: All customers
FROM: Emerson Commercial & Residential Solutions – Alco Controls, Europe

Subject: ESC Coils for use with all Solenoid Valves Series, OM Oil Management products and EX2/CX2 Expansion Valves.

Emerson Commercial and Residential Solutions is pleased to announce the release of the new range of ESC coils and the retainer kit (two O-rings, retainer and the new design screw cap). The range includes UL approved, high wattage and ATEX versions, to cover all applications and all common supply voltages.

These new range of coils will replace the existing ASC and ASC3 coils for all products incorporating a coil.

Ordering parts:

Type	Part code Single/Multipack	Nominal Voltage, frequency	Electrical connection/ Protection	Applicable for	Marking
ESC-24VAC	801033/801033M	24VAC, 50Hz	DIN plug/ IP65	EX2/CX2, OM3/4 110RB, 200RB, 200RH 240RA, 540RA, M36	CE & UL
ESC-230VAC	801031/801031M	230VAC, 50Hz			CE & UL
ESC-24VDC	801030/801030M	24VDC		110RB, 200RB, 240RA, 540RA, M36	CE
ESC-120VAC	801032/801032M	120VAC, 50Hz		CE & UL	
ESC-W24VAC	801028/801028M	24VAC, 50Hz		OM5	CE
ESC-W230VAC	801029/801029M	230VAC, 50Hz			CE
ESC-EX24VAC	801035	24VAC, 50Hz	3 m cable molded to coil/ IP65	110RB, 200RB, 200RH, 200RB-...FLR	CE & ATEX
ESC-EX230VAC	801036	230VAC, 50Hz			CE & ATEX

Note 1: Coils are delivered including retainer kit (two O-rings, retainer and the screw cap)

Note 2: Multipack is 20 pieces.

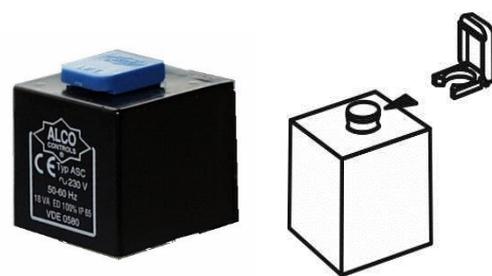
Note 3: The ESC coils can be use at 60 Hz frequency also, keeping in mind that the MOPD will decrease.

Plug/cable assemblies have remained unchanged. Please order plug/cable assemblies separately (see accessories table on page 4).

ASC3 & Retainer

ASC & Retainer

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New ESC & Retainer

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The ESC coil has a new screw cap design, different than the old version which has a pressing cap.

Comparison:

Description	ASC3 series	ASC series	ESC series
Voltage, frequency	Identical		
Performance	Identical		
Fastening/Retainer	Orange cap	Blue clip	Orange screw cap
Fasten type	Pressing	Pressing	Screwing
IP65 protection	Two O-rings, plus the pressing cap	Built in	Two O-rings, retainer and the screw cap
Electrical connection plug	Identical: DIN plug (ATEX version: 3 m cable molded to coil)		
Dimensions	Minor difference (see layout drawings)		
CE marking	Yes		
UL approval	Yes	No	Yes
Molding material	PPS	Epoxy	PPS
ATEX version	No	Yes (kit: coil + plug)	Yes (3m molded cable)
High wattage version for OM5 in order to achieve 100 bar MOPD	Available	Not available	Available
Accessories: (see accessories selection table on page 4)	ASC-N15/30/60 PG9 Plug / PG11 Plug DS2-N15		

Ordering/replacement coils for all solenoid valves 110RB, 200RB, 240RA, 540RA, M36 and electronic expansion valves EX2, CX2:

ASC coil shall be replaced			ESC	
Type	PCN		Type	PCN
ASC-24VAC Including blue clip	801062	→	ESC-24VAC Including retainer	801033
ASC-24VDC Including blue clip	801974		ESC-24VDC Including retainer	801030
ASC-230VAC Including blue clip	801064		ESC-230VAC Including retainer	801031
ASC-120VAC Including blue clip	801063		ESC-120VAC Including retainer	801032

Note: The documentations might refer to ASC coils. They will be modified in a transition time.

Ordering Parts for OM5 oil management:

ASC3 coil shall be replaced			ESC	
Type	PCN		Type	PCN
ASC3-W24VAC including orange cap and two O-rings	801074	→	ESC-W24VAC Including retainer	801028
ASC3-W230VAC including orange cap and two O-rings	801075		ESC-W230VDC Including retainer	801029

Note: The documentations might refer to ASC3 coils. They will be modified in a transition time.

Ordering Parts for OM3/OM4 (including the kits) oil management:

ASC coil shall be replaced			ESC	
Type	PCN		Type	PCN
ASC-24VAC Including blue clip	801062	→	ESC-24VAC Including retainer	801033
ASC-230VAC Including blue clip	801064		ESC-230VAC Including retainer	801031

Note: The OM3/4 documentation is referring to ASC3. They will be modified in a transition time.

Oil management kit (OM3/OM4/OM5) which includes the coil and adapter will be delivered with new ESC coils. Part code number of oil management kits remain unchanged.

Ordering Parts for solenoid valves 200RB-...FLR for use with propane R290 (ATEX):

ASC coil shall be replaced		ESC	
Type	PCN	Type	PCN
ASC-24VAC+PG9 ATEX Including blue clip	801123	ESC-EX24VAC Including retainer	801035
ASC-230VAC+PG9 ATEX Including blue clip	801124	ESC-EX230VAC Including retainer	801036

Note: The ESC-EX, ATEX version coils have a molded cable, 3 m in length.

Accessories selection table:

Cable Assembly for ESC Coils					
Type	Part code Single/multipack	Description	Cable length	Temperature range	
ASC-N15	804570/804570M	Connector Cable Assembly to Relay	1.5 m	-50...+80°C (valid for stationary use)	
ASC-N30	804571/804571M		3.0 m		
ASC-N60	804572		6.0 m		
Cable Assembly for 24V DC Chopper Plug					
Type	Part code Single pack	Description	Cable length	Temperature range	
D2-N15	804620	Chopper Plug (Low power assumption, 3W only, not released for mobile applications)	1.5 m	-10...+80°C (valid for stationary use)	
Others					
Type	Part No.	Description			
Plug PG9	801012	Plug acc. EN175301 with cable gland			
Plug PG11	801013				
ESC-K01	801034	ESC kit: Two O-rings, screw cap and retainer			

Note: Multipack = 20 pieces

Timing:

Emerson Commercial & Residential Solutions announces the start of phase-out of current ASC and ASC3 product ranges within a transition period and replacement ESC.

ESC: sample ordering*	From beginning of September 2018
ESC: ordering	From middle of October 2018
ESC: delivery	From beginning of November 2018
ASC/ASC3: last order for production	February 2019; for deliveries latest June 2019
ASC/ASC3: ordering after February 2019	Emerson will acknowledge with equivalent ESC coils

* ESC samples available in versions:

- ESC-230 VAC 50 Hz, 801031
- ESC-24 VAC 50 Hz, 801033

For any additional information, please contact Emerson local Sales representative.

FAQ's

- Q) Can the existing blue clip or pressing cap be used with the new coil?
- A) No, please use the new retainer kit (two O-rings, retainer and the screw cap).

- Q) Can the O-rings from the ASC3 coils be used with the ESC coils?
- A) No, please use the O-rings dedicated to the ESC coils.

- Q) Is the use of the O-ring and the screw cap mandatory?
- A) Yes.

- Q) Is there a kit as spare part available?
- A) Yes, ESC-K01, PCN 801034.

- Q) Can I use the coil at 60 Hz frequency and 24Vac or 230Vac?
- A) It is not recommended without test as the MOPD of coils reduces at 60 Hz and the valve might not be able to open. It depends to maximum working differential pressure of system, duty and temperature.

- Q) Why ATEX versions (ESC-EX...) are recommended to use for time being in systems having A2L group of refrigerants (mildly flammable)?
- A) If system designed according to IEC 60335-2-40, ESC-EX... versions fulfill the requirement in term of resistance to temperature.

- Q) Can I use high wattage coils (ESC-W...) versions with CX2 or 200RH?
- A) Yes. The MOPD will increase and allow the valves to overcome higher differential pressure in CO2 systems. Please consult Emerson local sales offices.